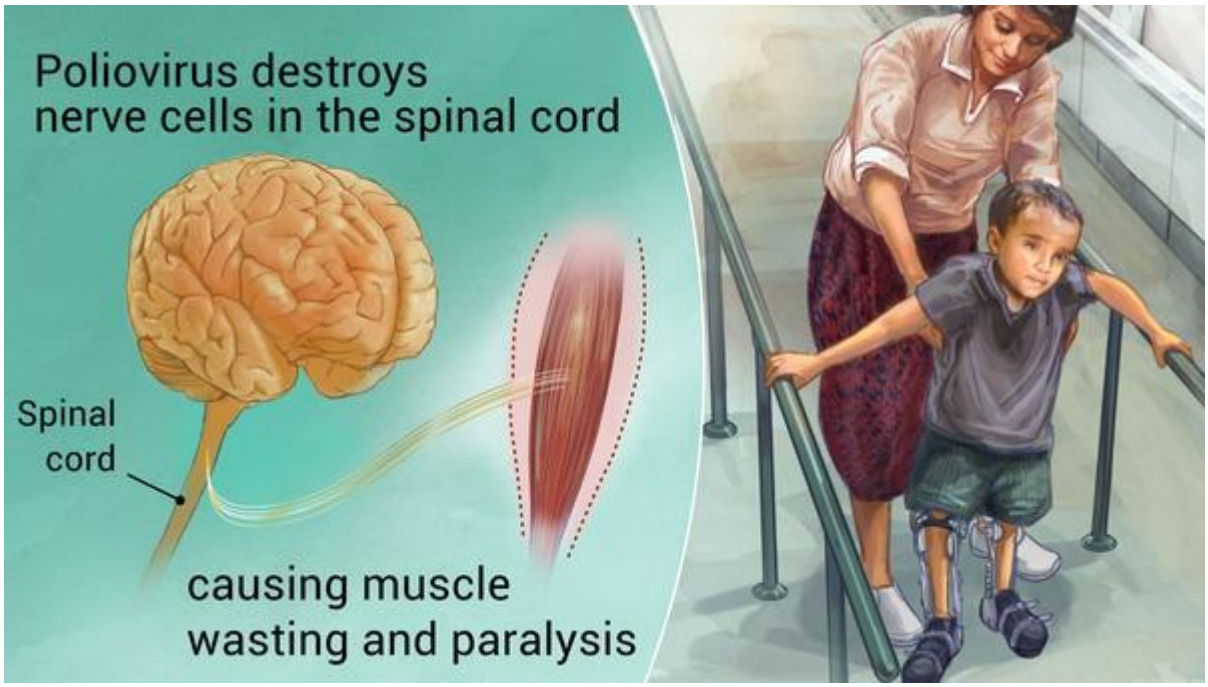
Polio (Poliomyelitis)

Polio and its symptoms

Polio is a highly infectious disease caused by a virus. It invades the nervous system, and can cause total paralysis in a matter of hours. The virus is transmitted by person-to-person spread mainly through the faecal-oral route or, less frequently, by a common vehicle (for example, contaminated water or food) and multiplies in the intestine. Initial symptoms are fever, fatigue, headache, vomiting, stiffness of the neck and pain in the limbs. 1 in 200 infections leads to irreversible paralysis (usually in the legs). Among those paralysed, 5% to 10% die when their breathing muscles become immobilized.



Treatment

There is no cure for polio, it can only be prevented. Polio vaccine, given multiple times, can protect a child for life.

Prevention

Polio Vaccines

OPV (ORAL POLIO VACCINE) and IPV (INACTIVATED POLIO VACCINE) have important but distinct advantages, and both vaccines are necessary to end polio for good. Because OPV protects both the individual and the community, it is essential to stop wild poliovirus transmission. IPV is being introduced as part of preparations for OPV cessation and is vital to end polio once and for all. As part of the polio eradication endgame, all countries will stop OPV use. At that point, only IPV will be used to maintain population immunity levels to sustain a polio-free world.

Types Of Polio Vaccine		
	ORAL POLIO VACCINE (OPV)	INACTIVATED POLIO VACCINE (IPV)
Contains	Mixture of live, weakened poliovirus strains. Trivalent OPV: All three poliovirus types Bivalent OPV: Types 1 and 3 Monovalent OPV: Any one individual type	Mixture of inactivated, killed strains of all three poliovirus types.
How It Works	Body produces antibodies in the blood and gut in response to the weakened virus. Helps stop transmission by limiting the virus's ability to replicate in the gut and spread to infect others.	Body produces antibodies in the blood in response to the inactivated virus. Protects the individual, but the virus may still replicate in the gut and could spread to infect others.
Administration	Easy, oral administration can be conducted by volunteers and is part of many countries' routine immunisation programme. Used extensively in immunisation campaigns to root out poliovirus.	Vaccine injection is administered primarily through routine immunisation programmes by trained health workers.

Key facts

- Polio (poliomyelitis) mainly affects children under 5 years of age.
- 1 in 200 infections leads to irreversible paralysis. Among those paralysed, 5% to 10% die when their breathing muscles become immobilized.
- Polio cases have decreased by over 99% since 1988, from an estimated 350 000 cases then, to 37 reported cases in 2016. As a result of the global effort to eradicate the disease, more than 16 million people have been saved from paralysis.
- As long as a single child remains infected, children in all countries are at risk of contracting polio. Failure to eradicate polio from these last remaining strongholds could result in as many as 200 000 new cases every year, within 10 years, all over the world.
- In most countries, the global effort has expanded capacities to tackle other infectious diseases by building effective surveillance and immunization systems.

Reference : www.who.nic.in